

15-C

CAST IRON

**Manhole Frames & Covers
Drain Grates · Inlets
Double Grate Bars
Boiler Grates**

CATALOGUE NO.3



Banner Iron Works

4560 SHAW BLVD.

Saint Louis

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Banner Iron Works

4560 SHAW BLVD.

Saint Louis



CATALOGUE No. 3

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E. C. F. KOKEN, ST. LOUIS**

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Vice-President

E. C. F. KOKEN
Secy.-Treas.

CATALOGUE No. 3

FOREWORD

In this revised catalogue of Cast Iron Grates, Inlets, Covers and Frames for Manholes, etc., a number of new patterns that were not shown in the previous issue have been added. All cuts have been made with a view of showing the necessary details only. The descriptions of the cuts give the required dimensions, weights and list prices of each article.

The list prices in this catalogue have been changed to conform to present market conditions of material and labor, and cancel all prices given in previous catalogues.

We carry in stock a sufficient number of castings of each pattern to meet ordinary demands. Our facilities enable us to make prompt deliveries of quantity orders.

We are prepared to furnish any special castings not shown. Let us quote you on your requirements.



All prices are f. o. b. our plant, subject to discount.

Quantity orders will be delivered within the city limits, or f. o. b. cars St. Louis, without extra charge.

For small quantities, an extra charge will be made for delivery.

Crating or boxing, if necessary, will be charged at cost.

Terms: Net cash; payable in St. Louis Exchange.

List prices subject to discount and change without notice.

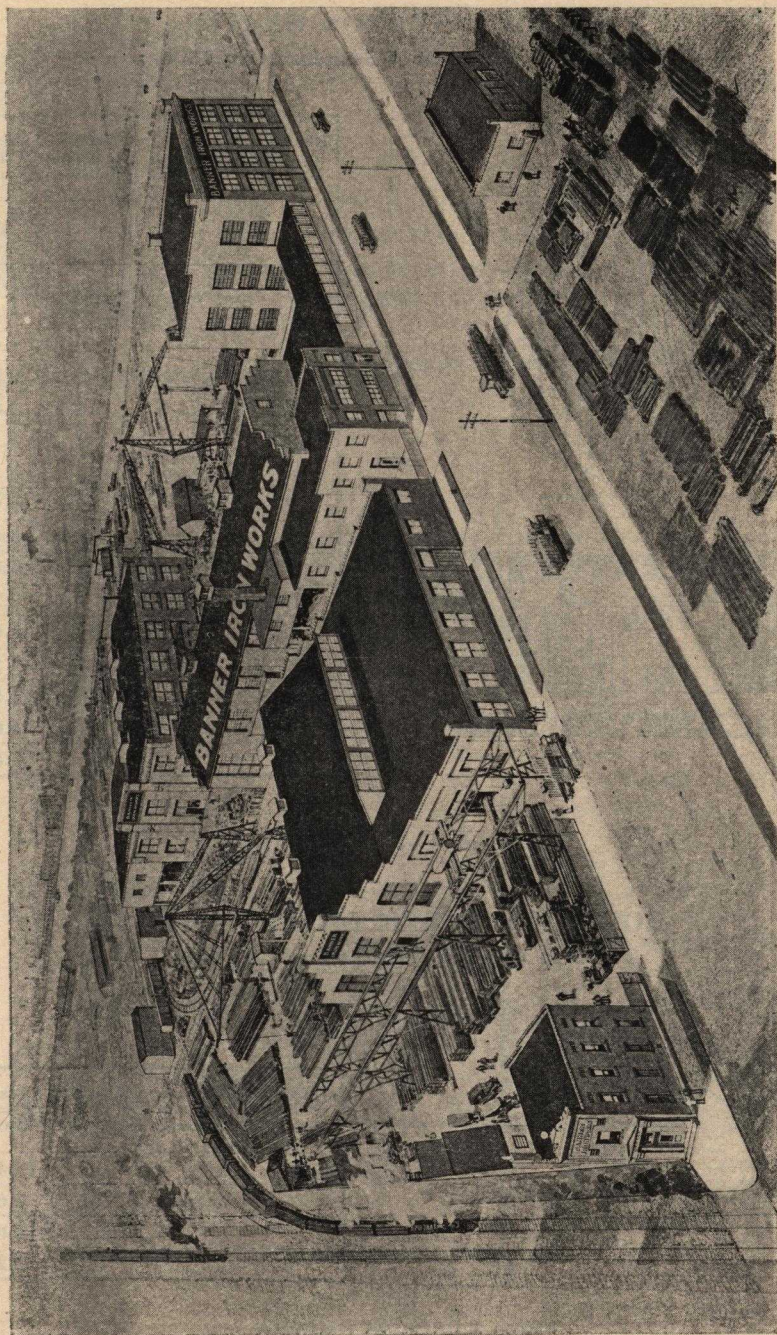
Address all communications to

Banner Iron Works

4560 SHAW BLVD.

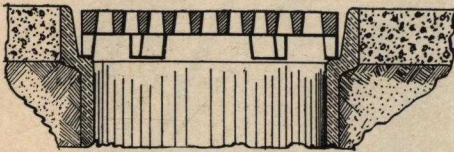
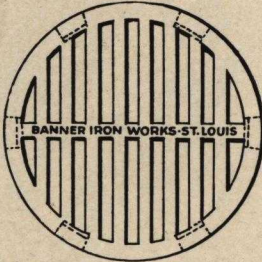
Saint Louis

BANNER IRON WORKS



ROUND CAST IRON GRATES
To Fit in Bell Ends of Standard Clay Pipe

No. 4710



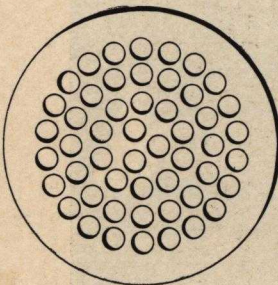
Sectional View Showing Bell End of Sewer Pipe
in Concrete Floor with Grate in Place

Diameter of Pipe (Inches)	Diameter of Grate (Inches)	Weight of Grate (Pounds)	List Price Each
4	5 $\frac{1}{8}$	2	\$0.50
6	7 $\frac{1}{2}$	4	0.70
7	8 $\frac{5}{8}$	7	1.10
8	9 $\frac{3}{4}$	8	1.30
9	10 $\frac{5}{8}$	11	1.60
10	11 $\frac{5}{8}$	15	2.00
12	14	18	2.50
14	16 $\frac{1}{4}$	32	3.50
15	17 $\frac{1}{2}$	40	4.50
16	18 $\frac{3}{4}$	51	6.00
18	20 $\frac{1}{2}$	62	8.00
18	21 $\frac{3}{4}$	62	8.00
20	23 $\frac{1}{4}$	92	9.20
21	24 $\frac{3}{4}$	95	10.00
22	25 $\frac{1}{2}$	100	11 50
24	28	137	13.50
30	34 $\frac{1}{2}$	275	24.00
36	41 $\frac{3}{4}$	385	35.00

ROUND CAST IRON DRAIN PLATES

To Fit in Bell Ends of Standard Clay Pipe

No. 4711

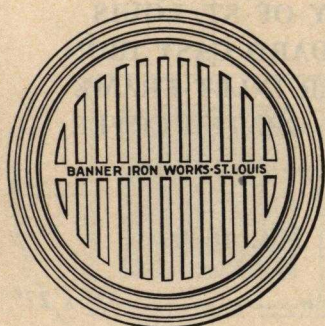


Diameter of Pipe (Inches)	Diameter of Grate (Inches)	Weight of Grate (Pounds)	List Price Each
4	5 $\frac{1}{8}$	1 $\frac{1}{4}$	\$0.40
6	7 $\frac{1}{2}$	2 $\frac{1}{4}$	0.60
7	8 $\frac{5}{8}$	6	1.00
8	9 $\frac{3}{4}$	8 $\frac{1}{4}$	1.20

Prices Subject to Discount

ROUND CAST IRON FRAMES WITH GRATED COVERS

No. 4570



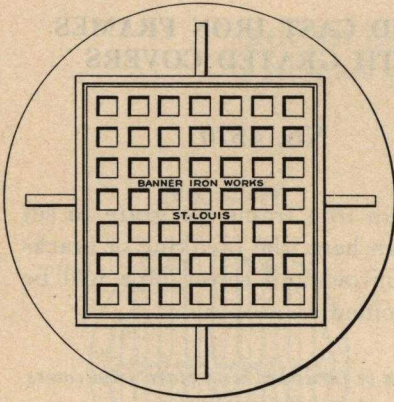
By using an iron frame for grate to set in, as shown here, the breaking or cracking of granitoid and sewer pipe will be greatly avoided.



Frames can be furnished with plain solid covers at an additional price.

Diameter of Grate (Inches)	Outside Diameter of Frame (Inches)	Depth of Frame (Inches)	Clear Opening (Inches)	Weight of Grate (Pounds)	Weight of Frame (Pounds)	List Price Grate Only	List Price Complete
10	14	2½	8⅝	12	21	\$1.50	\$6.60
12	16	2½	10½	15	26	2.00	8.00
15	19	2¾	13½	30	34	3.50	10.50
16	20	3	14¼	37	37	4.00	11.50
18	22	3	15¼	50	48	6.00	14.00
20	24	4	18⅛	53	68	7.00	17.00
22	26	4	20¼	80	71	8.00	18.50
24	28	4	22	100	78	10.50	22.00
26	30	4	24¼	107	95	11.50	25.00
32½	37	4	30	180	115	18.50	35.50

Prices Subject to Discount

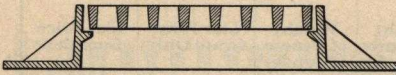


**CITY OF ST. LOUIS
STANDARD CAST IRON
SEWER INLET FRAME
WITH GRATED COVER**

Type "D" Grate

No. 4820

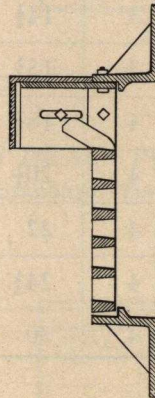
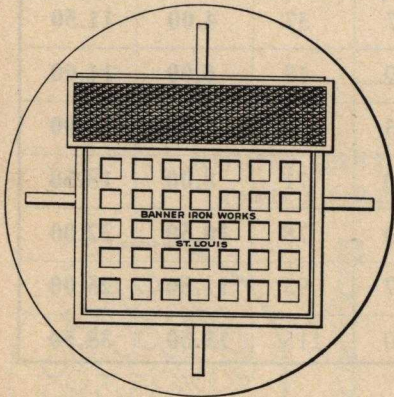
Size of Grate.....22" x 22"
Diameter of Frame, outside.....38"
Clear Opening.....20½" x 20½"
Height of Frame.....6"
Weight of Grate.....135 lbs.
Weight of Frame.....211 lbs.
List Price, complete.....\$35.00



**CITY OF ST. LOUIS STANDARD CAST IRON SEWER INLET
FRAME AND GRATED COVER WITH ADJUSTABLE CURB**

No. 4830

Type "A" Grate

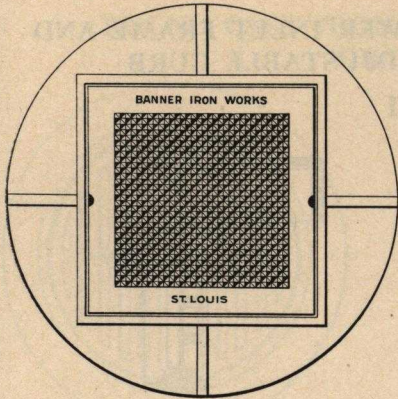


Note — Can be furnished with full flange, as shown, or with back flange cut off.

Weight of Grate,
131 lbs.
Weight of Frame
and Curb,
293 lbs.
List Price,
complete,
\$50.50

Size of Grate.....22" x 16"
Diameter of Frame, outside.....38"
Height of Frame.....6"
Size of Curb.....6" wide, 8" high above frame, 25¾" long

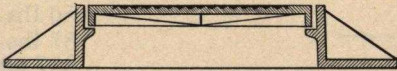
Prices Subject to Discount



ROUND CAST IRON FRAME WITH SQUARE SOLID COVER

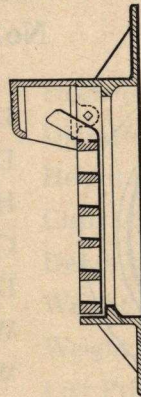
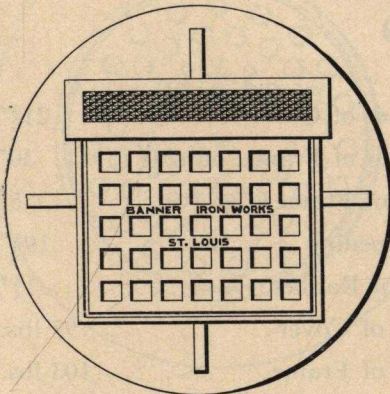
No. 4840

Size of Cover.....22" x 22"
Diameter of Frame, outside.....38"
Size of Clear Opening...20½" x 20½"
Depth of Rabbet.....2¼"
Thickness of Cover.....¾"
Height of Frame.....6"
Weight of Cover.....128 lbs.
Weight of Frame.....208 lbs.
List Price, complete.....**\$35.00**



CAST IRON SEWER INLET FRAME AND GRATED COVER WITH ONE-PIECE CURB

No. 4841



Note — Can be furnished with full flange, as shown, or with back flange cut off.

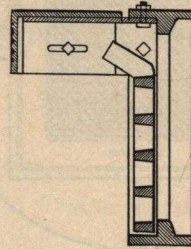
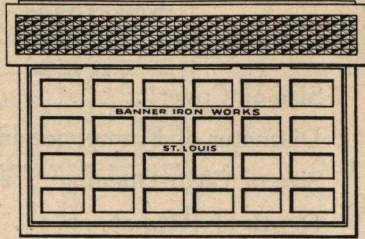
Weight of Grate,
131 lbs.
Weight of Frame
and Curb,
260 lbs.
List Price,
complete,
\$47.00

Size of Grate.....22" x 16"
Diameter of Frame, outside.....38"
Height of Frame.....6"
Size of Curb.....7" wide, 6" high above frame, 25" long

Prices Subject to Discount

**RECTANGULAR CAST IRON SEWER INLET FRAME AND
GRADED COVER WITH ADJUSTABLE CURB**

No. 4831



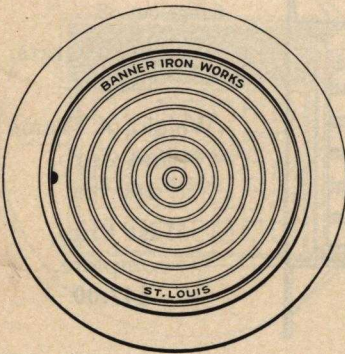
Size of Grate.....	24½" x 12"
Size of Frame, outside.....	26" x 18"
Height of Frame.....	5"
Size of Curb.....	5" wide, 8" high above frame, 28" long
Clear Opening.....	14" x 22"
Weight of Grate.....	56 lbs.
Weight of Frame and Curb.....	187 lbs.
List Price, complete.....	\$37.00



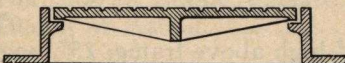
ROUND CAST IRON MANHOLE FRAME WITH SOLID COVER

Park Type

No. 4790

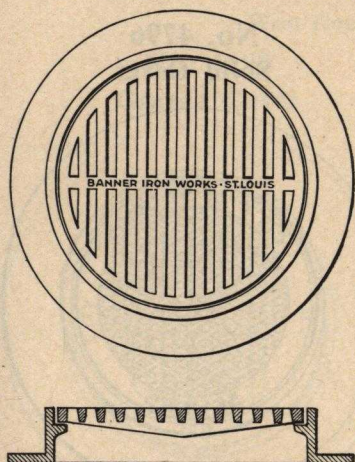


Diameter of Cover.....	21½"
Diameter of Frame, outside.....	30"
Height of Frame.....	5"
Clear Opening.....	19½"
Depth of Rabbet.....	1¼"
Weight of Cover.....	97 lbs.
Weight of Frame.....	103 lbs.
List Price, complete.....	\$21.50



Prices Subject to Discount

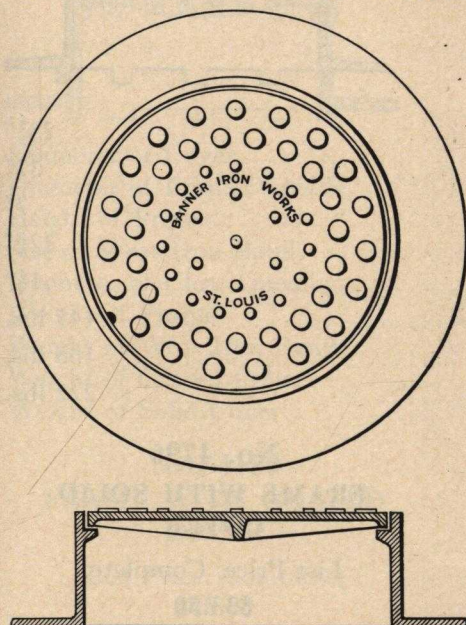
**ROUND CAST IRON MANHOLE FRAME WITH
GRADED COVER**



No. 4791

Diameter of Cover.....	21½"
Diameter of Frame, outside.....	30"
Height of Frame.....	5"
Clear Opening.....	19½"
Depth of Rabbet.....	1¼"
Weight of Cover.....	75 lbs.
Weight of Frame.....	103 lbs.
List Price, complete.....	\$21.00

**ROUND SUBURBAN STANDARD CAST IRON MANHOLE
FRAME WITH SOLID COVER**



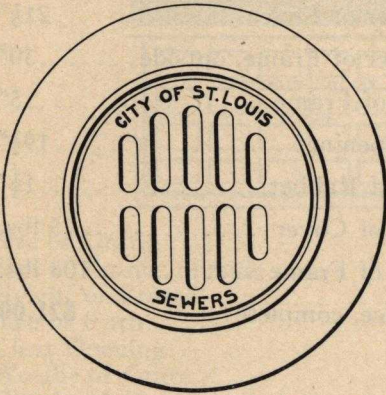
No. 4730

Diameter of Cover.....	23¾"
Diameter of Frame, outside.....	36"
Height of Frame.....	9"
Clear Opening.....	21"
Depth of Rabbet.....	1"
Weight of Cover.....	85 lbs.
Weight of Frame.....	255 lbs.
List Price, complete.....	\$33.00

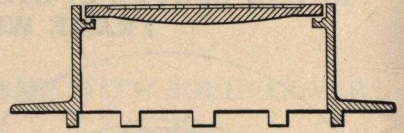
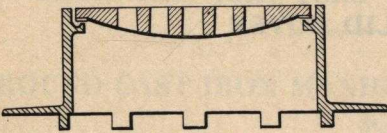
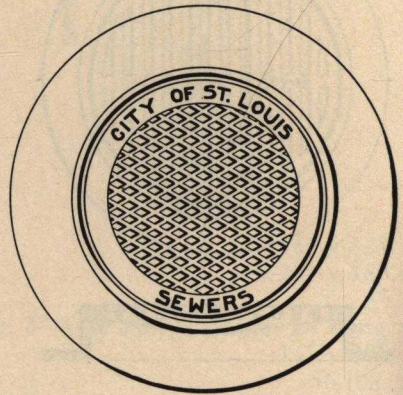
Prices Subject to Discount

CITY OF ST. LOUIS STANDARD CAST IRON MANHOLE
FRAMES WITH GRATED AND SOLID COVERS

No. 4795
Grated Cover



No. 4796
Solid Cover



Diameter of Cover.....	23 $\frac{5}{8}$ "
Diameter of Frame, outside.....	37"
Height of Frame.....	7"
Clear Opening.....	22 $\frac{3}{4}$ "
Depth of Rabbet.....	1 $\frac{1}{4}$ "
Weight of Grated Cover.....	147 lbs.
Weight of Solid Cover.....	165 lbs.
Weight of Frame.....	222 lbs.

No. 4795
FRAME WITH GRATED
COVER

List Price, Complete,
\$32.50

No. 4796
FRAME WITH SOLID
COVER

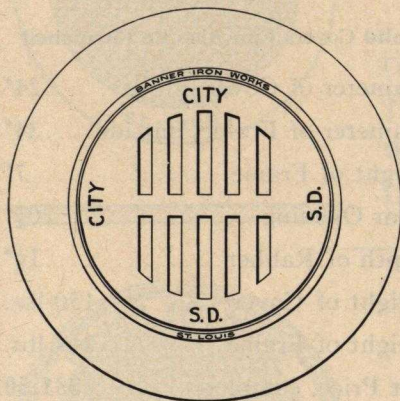
List Price, Complete,
\$33.50

Prices Subject to Discount

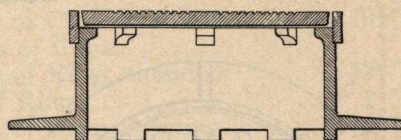
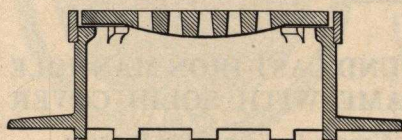
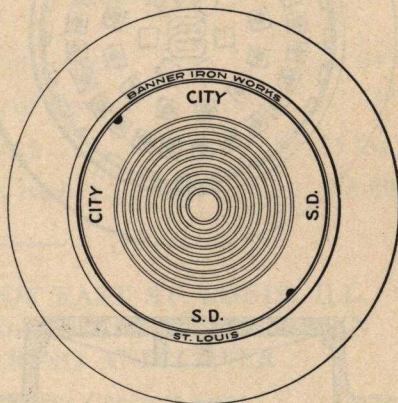
CAST IRON MANHOLE FRAMES WITH GRATED AND SOLID COVERS

Wrot Iron Band Shrunk On Frame

No. 4180
Grated Cover



No. 4181
Solid Cover



Diameter of Cover.....	23 $\frac{5}{8}$ "
Diameter of Frame, outside.....	37 $\frac{3}{4}$ "
Height of Frame.....	11 $\frac{1}{2}$ "
Size of Wrot Iron Band.....	3" x 1"
Diameter of Clear Opening.....	20"
Weight of Frame.....	346 lbs.
Weight of Wrot Iron Band.....	65 lbs.
Weight of Grated Cover.....	144 lbs.
Weight of Solid Cover.....	167 lbs.

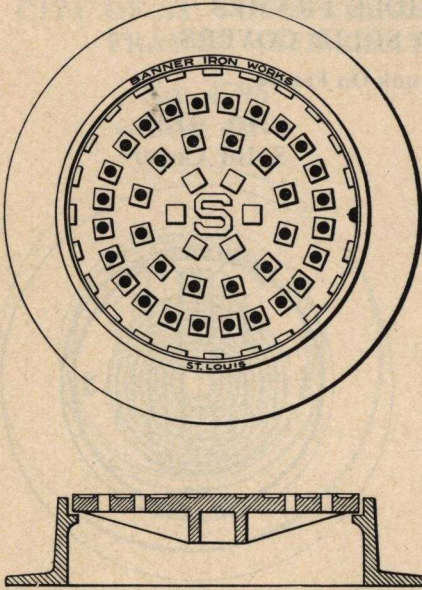
No. 4180
FRAME WITH GRATED
COVER

List Price, Complete,
\$48.00

No. 4181
FRAME WITH SOLID
COVER

List Price, Complete,
\$49.00

Prices Subject to Discount

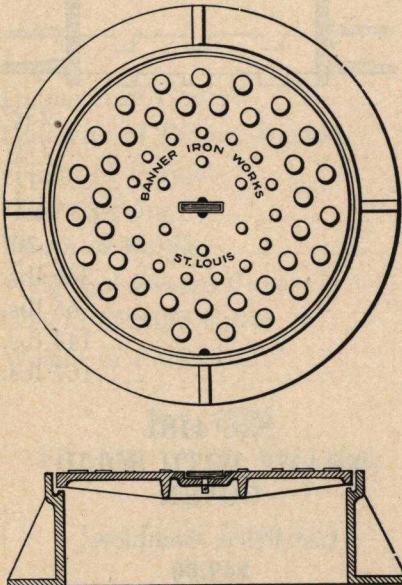


**CITY OF EAST ST. LOUIS, ILL.,
STANDARD MANHOLE FRAME
WITH VENTILATED COVER**

No. 4183

Solid Covers Can Also Be Furnished

Diameter of Cover.....	24"
Diameter of Frame, outside....	34"
Height of Frame.....	7"
Clear Opening.....	20 $\frac{3}{4}$ "
Depth of Rabbet.....	1 $\frac{1}{4}$ "
Weight of Cover.....	150 lbs.
Weight of Frame.....	214 lbs.
List Price, complete.....	\$31.50



**ROUND CAST IRON MANHOLE
FRAME WITH SOLID COVER**

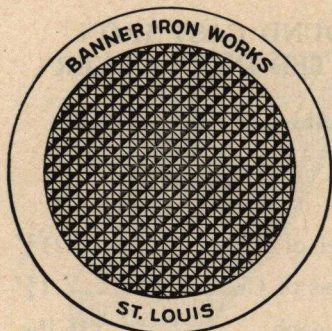
Groove In Frame For Packing

Flush Lift Handle On Cover

No. 4731

Diameter of Cover.....	24 $\frac{1}{4}$ "
Diameter of Frame, outside....	31 $\frac{1}{2}$ "
Height of Frame.....	9 $\frac{1}{2}$ "
Clear Opening.....	22"
Depth of Rabbet.....	1 $\frac{1}{4}$ "
Weight of Cover.....	105 lbs.
Weight of Frame.....	177 lbs.
List Price, complete.....	\$38.00

Prices Subject to Discount

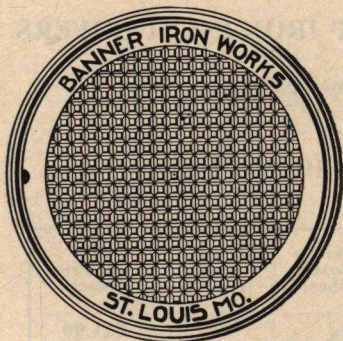


CITY OF ST. LOUIS STANDARD CAST IRON INLET COVER

For Stone or Concrete Caps

No. 4900

Diameter of Cover.....24"
Thickness of Cover..... $\frac{3}{4}$ "
Weight, each.....85 lbs.
List Price, each.....\$8.00

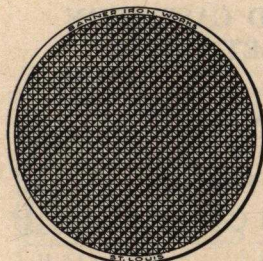
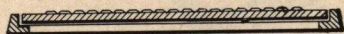


CITY OF EAST ST. LOUIS, ILL. STANDARD C. I. CATCH BASIN RING AND COVER

For Concrete Caps

No. 4901

Diameter of Cover.....20 $\frac{3}{4}$ "
Thickness of Cover..... $\frac{3}{4}$ "
Diameter of Ring, outside.....22 $\frac{3}{4}$ "
Height of Ring.....1 $\frac{1}{4}$ "
Diameter of Clear Opening.....18 $\frac{1}{2}$ "
Weight of Cover.....65 lbs.
Weight of Ring.....24 lbs.
List Price, complete.....\$12.00



ROUND CAST IRON INLET COVERS

For Stone or Concrete Caps

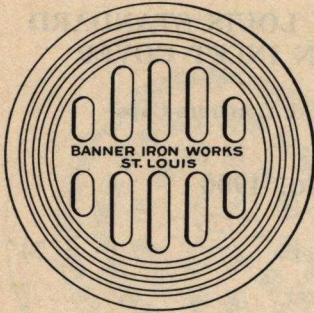
No. 4902

Note—16" diameter Cover is not ribbed.

Diameter of Cover (Inches)	Thickness of Cover (Inches)	Weight of Cover (Pounds)	List Price Each
16	$\frac{1}{2}$	26	\$4.50
18	$\frac{1}{2}$	39	5.20



Prices Subject to Discount



ROUND CAST IRON GRATED INLET COVER

For Stone or Concrete Caps

No. 4903

Diameter of Cover..... $21\frac{3}{4}$ "

Thickness of Cover..... $1\frac{1}{4}$ "

Weight, each.....136 lbs.

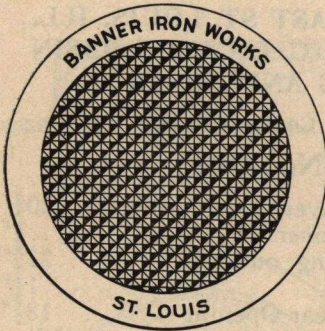
List Price, each.....**\$11.50**



ROUND CAST IRON INLET COVERS

For Stone or Concrete Caps

No. 4904



Diameter of Cover (Inches)	Thickness of Cover (Inches)	Weight of Cover (Pounds)	List Price Each
19	$1\frac{3}{4}$	123	\$11.00
20	1	82	8.00



ROUND CAST IRON INLET COVER

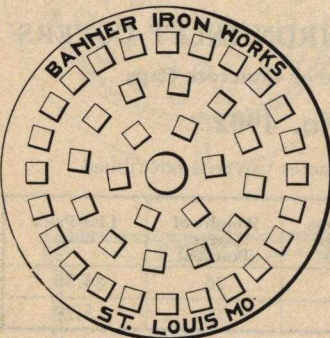
No. 4905

Diameter of Cover..... $22\frac{3}{4}$ "

Thickness of Cover..... $1\frac{1}{4}$ "

Weight, each.....146 lbs.

List Price, each.....**\$13.00**



Prices Subject to Discount

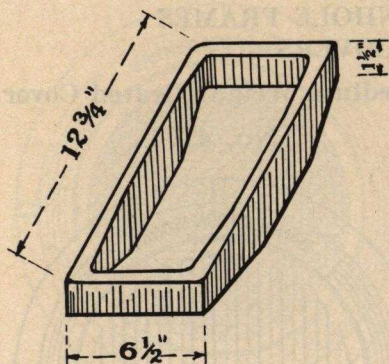
CITY OF ST. LOUIS
STANDARD CAST IRON
MANHOLE STEP

No. 4922

Metal $\frac{5}{8}$ " to $\frac{3}{4}$ " Thick

Weight, each 11 lbs.

List Price, each \$1.00



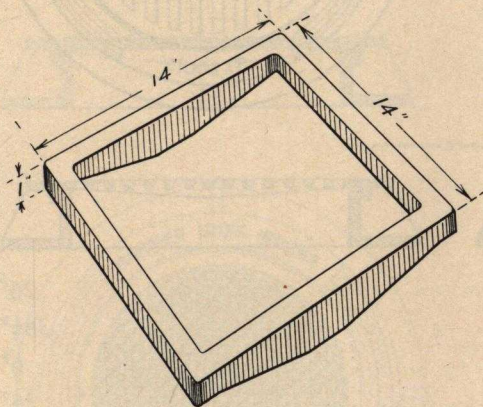
CITY OF ST. LOUIS
STANDARD CAST IRON
TUNNEL SHAFT STEP

No. 4923

Metal 1" Thick

Weight, each 17 lbs.

List Price, each \$3.00



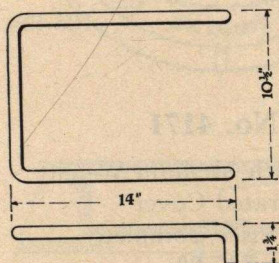
CITY OF ST. LOUIS STANDARD
WROT IRON MANHOLE STEP

No. 4920

Made of $\frac{3}{4}$ " Round Iron

Weight, each 5 lbs.

List Price, each \$0.60

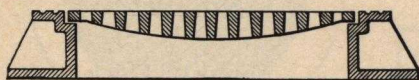
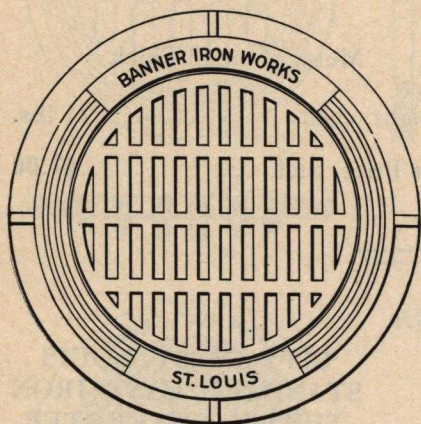


Prices Subject to Discount

ROUND CAST IRON MANHOLE FRAMES
WITH GRATED COVERS

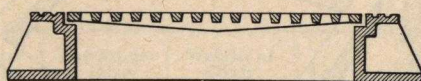
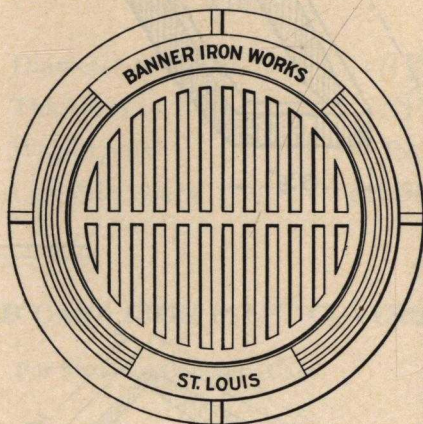
Heavy Grated Cover

No. 4170



Medium Weight Grated Cover

No. 4171



Diameter of Cover.....	26"
Diameter of Frame, outside.....	36½"
Height of Frame.....	6"
Diameter of Clear Opening.....	24"
Depth of Rabbet.....	1¼"
Weight of Frame.....	250 lbs.
Weight of Heavy Covers No. 4170.....	160 lbs.
Weight of Medium Weight Cover No. 4171.....	105 lbs.

PRICES

No. 4170

Frame with Heavy Grated
Cover

List Price, complete

\$50.00

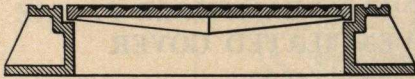
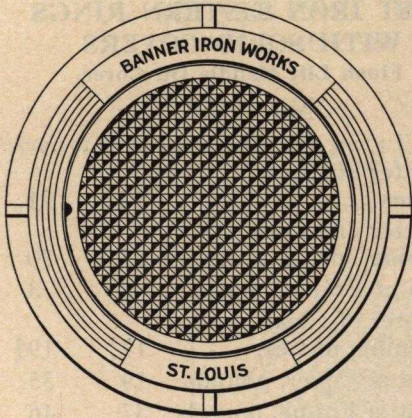
No. 4171

Frame with Medium Weight
Grated Cover

List Price, complete

\$47.00

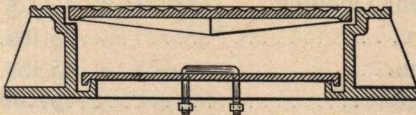
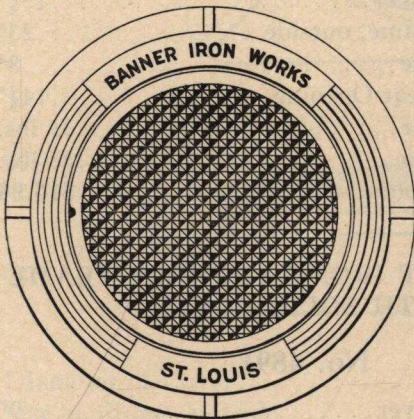
Prices Subject to Discount



ROUND CAST IRON MANHOLE FRAME WITH SOLID COVER

No. 4740

Diameter of Cover.....26"
Diameter of Frame, outside...36½"
Height of Frame.....6"
Diameter of Clear Opening...24"
Depth of Rabbet.....1¼"
Weight of Frame.....250 lbs.
Weight of Cover.....120 lbs.
List Price, complete.....\$48.00

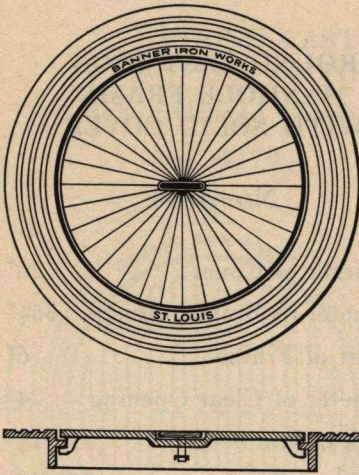


ROUND CAST IRON MANHOLE FRAME WITH SOLID OUTER AND INNER COVERS

No. 4800

Diameter of Outer Cover....26"
Diameter of Frame, outside...36½"
Diameter of Clear Opening...20½"
Height of Frame.....8"
Depth of Rabbet.....1¼"
Weight of Frame.....355 lbs.
Weight of Outer Cover...120 lbs.
Weight of Inner Cover...45 lbs.
List Price, complete.....\$67.00

Prices Subject to Discount



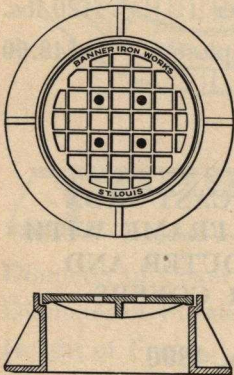
CAST IRON CISTERN RINGS WITH SOLID COVERS

Flush Lift Handle On Cover

No. 4150

Note—Turning of handle secures cover to frame.

Diameter of Cover, inches.....	18	21
Diameter of Frame, outside, inches.....	27	30
Depth of Frame, inches..	3	3
Diameter of Clear Opening, inches.....	17 $\frac{1}{4}$	19 $\frac{3}{4}$
Weight of Cover, pounds.	19	35
Weight of Frame, pounds	37	46
List Price, complete.....	\$15.00	\$18.00

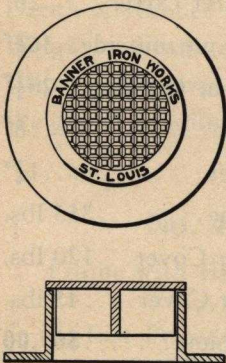


ROUND CAST IRON LAMPHOLE FRAME WITH VENTILATED COVER

No. 4890

Solid Cover Can Also Be Furnished

Diameter of Cover.....	15 $\frac{1}{4}$ "
Diameter of Frame, outside.....	23"
Height of Frame.....	8"
Diameter of Clear Opening.....	14 $\frac{7}{8}$ "
Weight of Cover.....	35 lbs.
Weight of Frame.....	85 lbs.
List Price, complete.....	\$18.00



ROUND CAST IRON LAMPHOLE FRAME WITH SOLID COVER

No. 4891

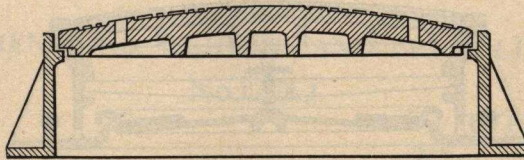
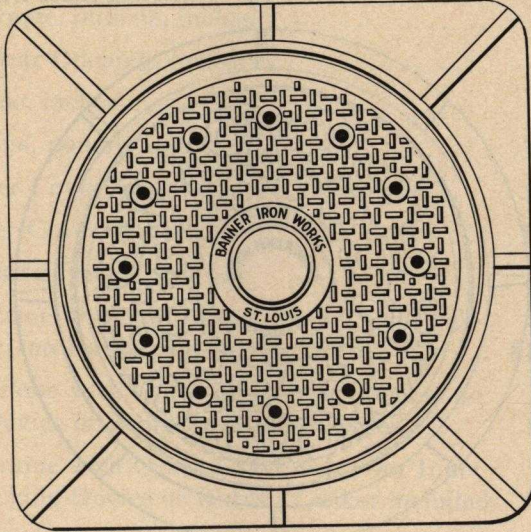
Diameter of Cover.....	9"
Diameter of Frame, outside.....	14 $\frac{1}{4}$ "
Height of Frame.....	7"
Diameter of Clear Opening.....	8"
Weight of Cover.....	25 lbs.
Weight of Frame.....	45 lbs.
List Price, complete.....	\$7.00

Prices Subject to Discount

SQUARE CAST IRON MANHOLE FRAME
WITH ROUND VENTILATED COVER

No. 4760

Solid Cover Can Also Be Furnished



Diameter of Cover.....	34 $\frac{1}{4}$ "
Size of Frame, outside.....	42 $\frac{1}{2}$ " x 42 $\frac{1}{2}$ "
Height of Frame.....	10"
Diameter of Clear Opening.....	31 $\frac{5}{8}$ "
Depth of Rabbet.....	1 $\frac{1}{2}$ "
Weight of Cover.....	400 lbs.
Weight of Frame.....	540 lbs.
List Price, complete.....	\$90.00

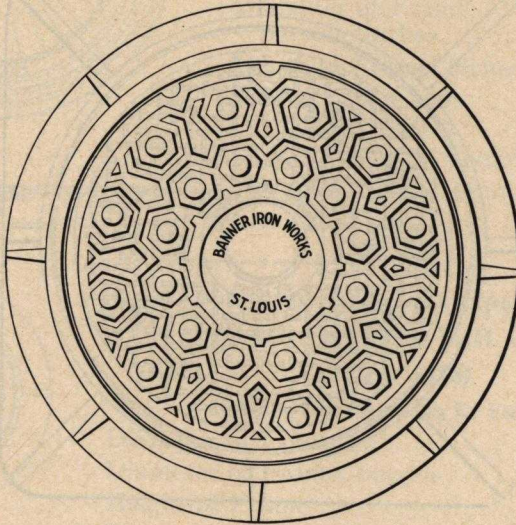
Prices Subject to Discount

**ROUND CAST IRON MANHOLE FRAMES
WITH SOLID COVERS**

No. 4761---Frame With Outer and Inner Covers
Inner Cover Has Locking Device

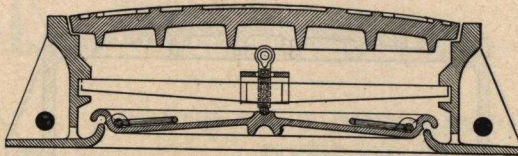
No. 4762---Frame With Outer Cover Only

Outer Covers Can Be Furnished With Ventilating Holes When Desired



Plan showing outer cover and frame of No. 4761 and 4762

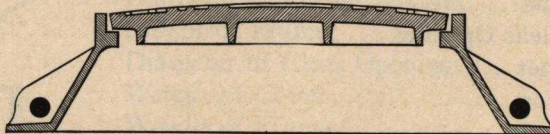
Type "A"



SECTION THRU No. 4761

A $\frac{3}{4}$ " diameter rubber gasket can be placed between the inner cover and the frame

Type "B"



SECTION THRU No. 4762

See Page 21 for Dimensions, Weights and Prices of above

DIMENSIONS, WEIGHTS AND PRICE LIST

No. 4761

	TYPE "A"	
	27"	30"
Diameter of Outer Cover, inches.....	33½	36½
Diameter of Frame, outside, inches.....	43½	46½
Diameter of Clear Opening, inches.....	27	30
Height of Frame, inches.....	11	11
Weight of Frame, pounds.....	565	585
Weight of Outer Cover, pounds.....	390	455
Weight of Inner Cover, pounds.....	123	163
Weight of Locking Device, pounds.....	23	25
List Price of Frame, Outer and Inner Covers and Locking Device; no Rubber Gasket included.....	\$144.00	\$166.00
List Price of Frame with Outer and Inner Covers; no Locking Device or Rubber Gasket included.....	129.00	151.00
List Price of Frame with Outer Cover only; no Inner Cover, Locking Device or Rubber Gasket included.....	113.00	125.00



DIMENSIONS, WEIGHTS AND PRICE LIST

No. 4762

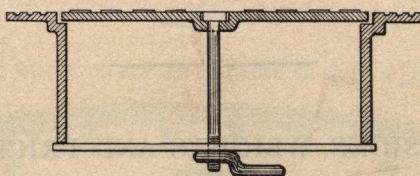
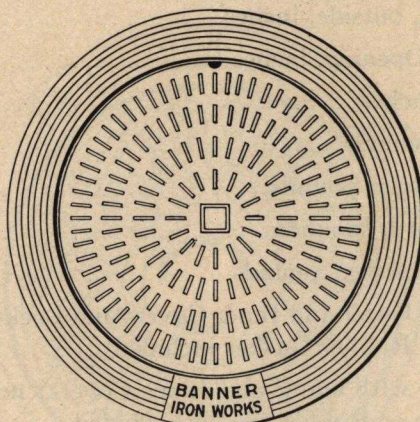
	TYPE "B"		
	24"	27"	30"
Diameter of Cover, inches.....	25¾	28¾	31¾
Diameter of Frame, outside, inches.....	43	46	49
Diameter of Clear Opening, inches.....	24	27	30
Height of Frame, inches.....	10	10	10
Weight of Frame, pounds.....	360	365	411
Weight of Cover, pounds.....	190	285	339
List Price, complete.....	\$66.50	\$84.00	\$101.00

Prices Subject to Discount

CAST IRON COAL RINGS WITH SOLID COVERS

Locking Arrangement Underneath

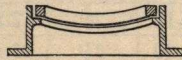
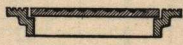
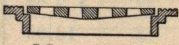
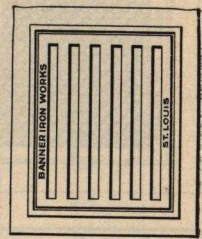
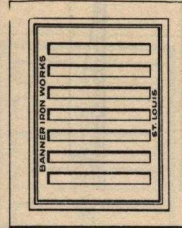
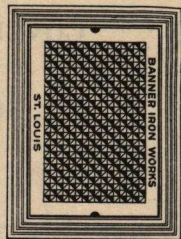
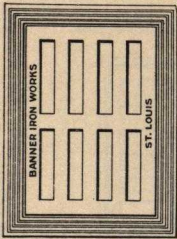
No. 4140



Type	Diameter of Cover (Inches)	Diameter of Ring Outside (Inches)	Diameter of Opening (Inches)	Depth of Ring (Inches)	Depth of Rabbet (Inches)	Weight of Cover (Pounds)	Weight of Ring (Pounds)	List Price Complete
A	19 $\frac{1}{4}$	25 $\frac{1}{2}$	17 $\frac{1}{2}$	4 $\frac{3}{4}$	$\frac{5}{8}$	50	75	\$20.00
B	19 $\frac{1}{4}$	25 $\frac{1}{2}$	17 $\frac{1}{2}$	8	$\frac{5}{8}$	50	95	24.00
C	25	31 $\frac{1}{2}$	24	4	$\frac{5}{8}$	95	80	23.00
D	25	31 $\frac{1}{2}$	24	8	$\frac{5}{8}$	95	118	28.00
E	31 $\frac{1}{4}$	37 $\frac{1}{2}$	30	7	$\frac{5}{8}$	172	185	49.00
F	35 $\frac{3}{4}$	40	35	6	$\frac{5}{8}$	240	303	66.00

Prices Subject to Discount

RECTANGULAR CAST IRON FRAMES WITH FLAT AND CONCAVE GRATES AND SOLID COVERS



No. 4720

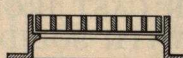
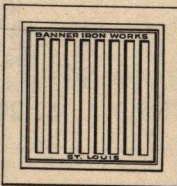
No. 4721

No. 4854

No. 4855

Style No.	Size of Cover or Grate (Inches)	Size of Frame Outside (Inches)	Height of Frame (Inches)	Clear Opening (Inches)	Weight of Cover or Grate (Pounds)	Weight of Frame (Pounds)	List Price Complete
4720	14 x 20	18 x 24	2 ³ / ₄	12 ¹ / ₂ x 18 ¹ / ₂	42	62	\$14.00
4721	14 x 20	18 x 24	2 ³ / ₄	12 ¹ / ₂ x 18 ¹ / ₂	41	62	14.00
4854	14 x 18	19 x 23	4 ¹ / ₂	12 x 16	40	76	15.00
4855	14 x 18	19 x 23	4 ¹ / ₂	12 x 16	45	76	15.50

SQUARE CAST IRON FRAMES WITH FLAT AND CONCAVE GRATES AND SOLID COVERS



No. 4850

No. 4851

No. 4852

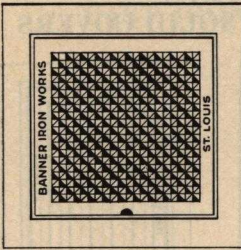
No. 4853

Style No.	Size of Cover or Grate (Inches)	Size of Frame Outside (Inches)	Height of Frame (Inches)	Clear Opening (Inches)	Weight of Cover or Grate (Pounds)	Weight of Frame (Pounds)	List Price Complete
4850	13 x 13	18 x 18	4 ¹ / ₂	12 x 12	27	54	\$13.00
4851	13 x 13	18 x 18	4 ¹ / ₂	12 x 12	38	54	12.00
4852	13 x 13	18 x 18	4 ¹ / ₂	12 x 12	54	54	14.50
4853	13 x 13	18 x 18	4 ¹ / ₂	12 x 12	33	54	12.50

Prices Subject to Discount

**SQUARE CAST IRON CLEANOUT
FRAMES WITH SOLID
COVERS**

No. 4620



Style	Size of Cover (Inches)	Size of Frame Outside (Inches)	Height of Frame (Inches)	Size of Clear Opening (Inches)	Depth of Rabbet (Inches)	Weight of Cover (Pounds)	Weight of Frame (Pounds)	List Price Complete
A	13 x 13	17 x 17	2½	12 x 12	⅝	20	29	\$ 9.50
B	16 x 16	20 x 20	2½	15 x 15	⅝	32	48	13.00
C	19 x 19	23 x 23	2½	18 x 18	⅝	45	48	17.00
D	37¼ x 37¼	40½ x 40½	2½	36 x 36	⅝	192	101	59.00

**SQUARE CAST IRON HANDHOLE FRAME
WITH SOLID COVER**

Flush Lift Handle

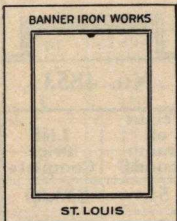
No. 4880



Size of Cover.....	13" x 13"
Size of Frame, outside.....	14¾" x 14¾"
Depth of Frame.....	2"
Size of Clear Opening.....	9½" x 9½"
Weight of Cover.....	15 lbs.
Weight of Frame.....	15 lbs.
List Price, complete.....	\$7.20

**RECTANGULAR CAST IRON HANDHOLE
FRAME WITH SOLID COVER**

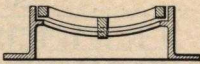
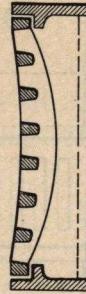
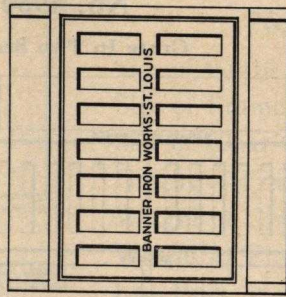
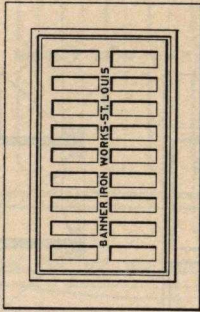
No. 4881



Size of Cover.....	7" x 9"
Size of Frame, outside.....	10½" x 12½"
Depth of Frame.....	1¾"
Size of Clear Opening.....	6" x 8"
Weight of Cover.....	4 lbs.
Weight of Frame.....	10 lbs.
List Price, complete.....	\$3.20

Prices Subject to Discount

RECTANGULAR CAST IRON FRAMES
WITH CONCAVE GRATES



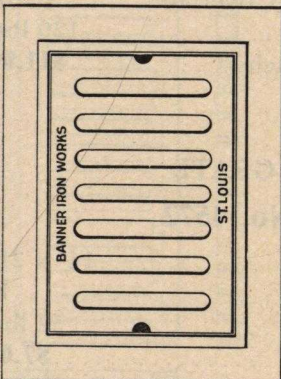
No. 4860



No. 4861

Style No.	Size of Grate (Inches)	Size of Frame Outside (Inches)	Clear Opening (Inches)	Height of Frame (Inches)	Weight of Grate (Pounds)	Weight of Frame (Pounds)	List Price Complete
4860	14 x 26	23 x 34½	12½ x 24½	6	86	132	\$26.00
4861	14 x 20	21½ x 22	12¾ x 18¾	6	70	128	23.00

CITY OF EAST ST. LOUIS, ILL., STANDARD CAST IRON
GUTTER INLET FRAME WITH GRATED COVER



No. 4862

Size of Grate 15½" x 24"
 Size of Frame, outside . . . 24" x 32"
 Height of Frame 5"
 Clear Opening 14" x 22½"
 Weight of Grate 105 lbs.
 Weight of Frame 210 lbs.
 List Price, complete \$29.00

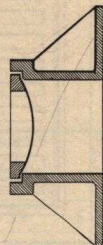
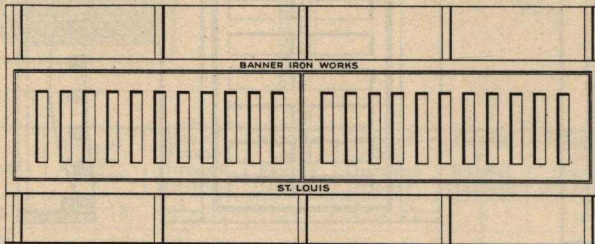
Prices Subject to Discount

RECTANGULAR CAST IRON FRAME WITH GRATED COVER

For Railway Track Drains

No. 4950

Grate In Two Sections



Size of Double Grates, over all.....	9" x 48"
Size of Frame, outside.....	20" x 50"
Height of Frame.....	7 ⁷ / ₈ "
Two Clear Openings, each.....	8" x 23 ¹ / ₂ "
Weight of Double Grates.....	103 lbs.
Weight of Frame.....	353 lbs.
List Price, complete.....	\$52.00

CITY OF EAST ST. LOUIS, ILL., STANDARD CAST IRON INLET GRATE

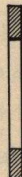
No. 4863



Size.....	18" x 24"
Thickness of Metal.....	1 ¹ / ₄ "
Depth of Rib, over all.....	3"
Weight.....	120 lbs.
List Price, each.....	\$11.00

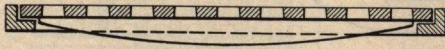
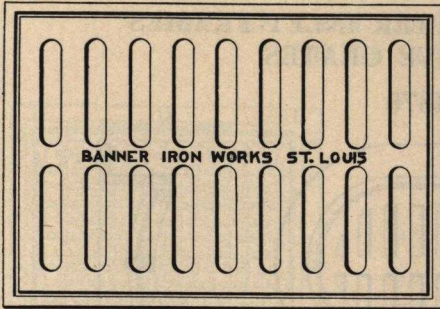
RECTANGULAR CAST IRON GRATE

No. 4572



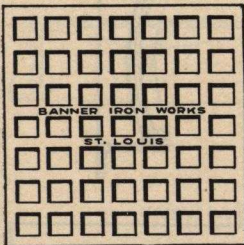
Size of Grate.....	14" x 21"
Thickness.....	1"
Weight.....	52 lbs.
List Price, each.....	\$7.00

Prices Subject to Discount



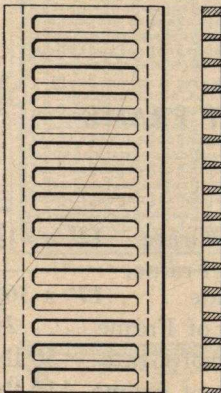
**RECTANGULAR CAST IRON
FRAME
WITH GRATED COVER
No. 4569**

Size of Grate 24" x 36"
Size of Frame, over all . 26" x 38"
Size of Clear Opening . 21" x 33"
Height of Frame 2"
Weight of Grate 252 lbs.
Weight of Frame 107 lbs.
List Price, complete \$32.00



**SQUARE CAST IRON GRATES
No. 4571**

Size of Grate (Inches)	Thickness of Grate (Inches)	Weight Each (Pounds)	List Price Each
8 x 8	1	9	\$1.70
10 x 10	1	14	2.20
12 x 12	1	20	3.40
20 x 20	1	53	7.50



**RECTANGULAR CAST IRON
GRATES
No. 4574**

Size of Grate (Inches)	Thickness of Grate (Inches)	Weight Each (Pounds)	List Price Each
17 x 21	2	102	\$ 9.80
17 x 41	2	185	15.50
17 x 46	2	211	16.60

Prices Subject to Discount

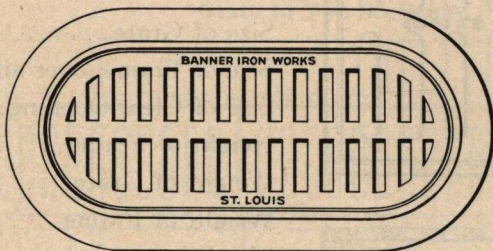
OVAL CAST IRON GUTTER INLET FRAMES
WITH CONCAVE GRATES

No. 4870

STYLE

"A"

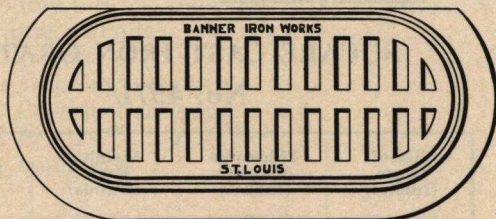
Full
Flange



STYLE

"B"

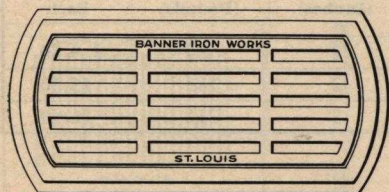
One
Flange
Cut Off



Style	Size of Grate (Inches)	Size of Frame (Inches)	Height of Frame (Inches)	Weight of Grate (Pounds)	Weight of Frame (Pounds)	List Price Complete
A	15 x 39	47 x 23	7	114	175	\$31.50
B	15 x 39	47 x 18	7	114	154	30.50

SEGMENT CAST IRON GUTTER INLET FRAME
WITH CONCAVE GRATE

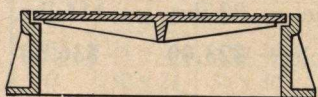
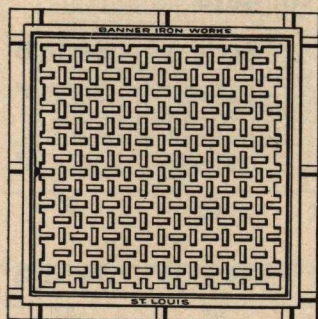
No. 4871



Size of Grate...12" x 31½"
Size of Frame,
outside.....17" x 36½"
Height of Frame.....2¾"
Weight of Grate...50 lbs.
Weight of Frame..110 lbs.
List Price, complete.\$25.00

Prices Subject to Discount

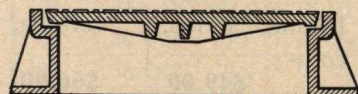
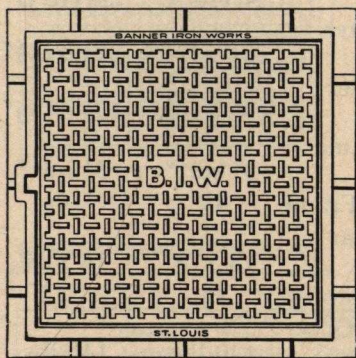
SQUARE CAST IRON MANHOLE FRAME WITH SOLID COVER



No. 4600

Size of Cover.....	24" x 24"
Size of Frame, outside.....	29" x 29"
Height of Frame.....	8"
Size of Clear Opening.....	21 $\frac{3}{4}$ " x 21 $\frac{3}{4}$ "
Depth of Rabbet.....	1 $\frac{1}{8}$ "
Weight of Cover.....	175 lbs.
Weight of Frame.....	260 lbs.
List Price, complete.....	\$47.00

SQUARE CAST IRON MANHOLE FRAME WITH SOLID COVER

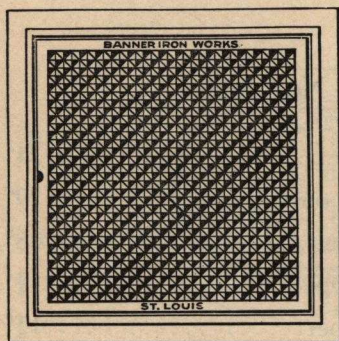


No. 4750

Size of Cover.....	28 $\frac{1}{2}$ " x 28 $\frac{1}{2}$ "
Size of Frame, outside.....	36" x 36"
Height of Frame.....	9"
Size of Clear Opening.....	26" x 26"
Depth of Rabbet.....	1 $\frac{1}{2}$ "
Weight of Cover.....	244 lbs.
Weight of Frame.....	451 lbs.
List Price, complete.....	\$68.00

Prices Subject to Discount

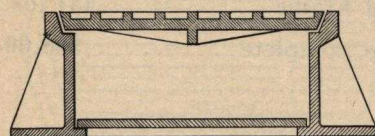
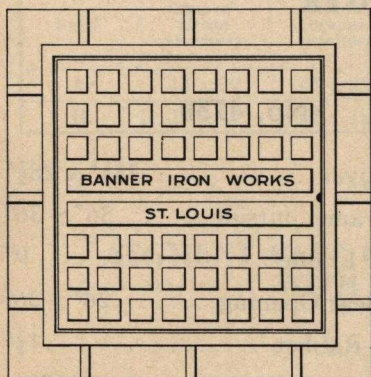
**SQUARE CAST IRON METER FRAMES
WITH SOLID COVERS**



No. 4610

	Style A	Style B
Size of Cover.....	24"x24"	30"x30"
Size of Frame, outside.....	29"x29"	36"x36"
Height of Frame...	2½"	3"
Size of Clear Opening.....	22½"x22½"	28½"x28½"
Depth of Rabbet...	¾"	¾"
Weight of Cover...	87 lbs.	135 lbs.
Weight of Frame...	82 lbs.	114 lbs.
List Price, complete	\$23.00	\$36.50

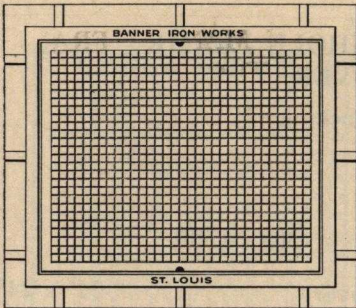
**SQUARE CAST IRON MANHOLE FRAMES
WITH SOLID INNER AND OUTER COVERS**



No. 4801

	Style A	Style B
Size of Outer Cover.....	22½"x22½"	22½"x22½"
Size of Inner Cover.....	19½"x19½"	19½"x19½"
Size of Frame, outside.....	31"x31"	31"x31"
Height of Frame.	4½"	10½"
Size of Clear Opening.....	18"x18"	18"x18"
Depth of Rabbet.	1⅝"	1⅝"
Weight of Outer Cover.....	140 lbs.	140 lbs.
Weight of Inner Cover.....	70 lbs.	70 lbs.
Weight of Frame	235 lbs.	430 lbs.
List Price, com- plete.....	\$49.00	\$66.00

Prices Subject to Discount

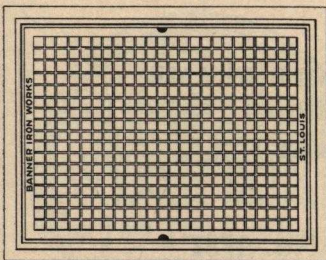


**RECTANGULAR CAST IRON
MANHOLE FRAMES
WITH SOLID COVERS**

No. 4770



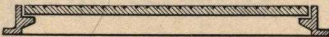
Style	Size of Cover (Inches)	Size of Frame Outside (Inches)	Height of Frame (Inches)	Size of Clear Opening (Inches)	Depth of Rabbet (Inches)	Weight of Cover (Pounds)	Weight of Frame (Pounds)	List Price Complete
A	18 x 18	22 x 22	4	16 x 16	1	70	112	\$26.00
B	24 x 24	30 x 30	4	22 x 22	1	141	138	36.50
C	30 x 24	36 x 30	4	28 x 22	1	175	152	44.00
D	30 x 30	36 x 36	4	28 x 28	1	208	173	54.00



**RECTANGULAR CAST IRON
MANHOLE FRAMES
WITH SOLID COVERS**

No. 4771

Note—*For Style "E" covers are made in two sections.

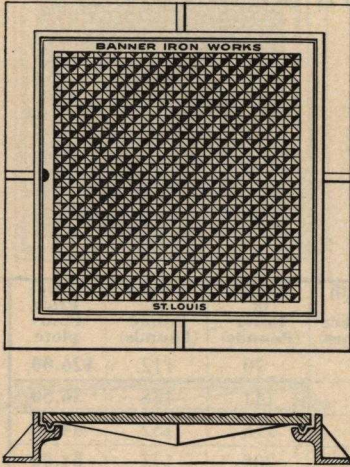


Style	Size of Cover (Inches)	Size of Frame Outside (Inches)	Height of Frame (Inches)	Size of Clear Opening (Inches)	Depth of Rabbet (Inches)	Weight of Cover (Pounds)	Weight of Frame (Pounds)	List Price Complete
A	18 x 18	21 x 21	2½	15¾ x 15¾	1	72	50	\$18.00
B	24 x 18	30 x 24	2½	22 x 16	1	100	66	23.00
C	30 x 24	33 x 27	2½	28 x 22	1	140	75	32.50
D	36 x 12	39 x 15	2½	34 x 10	1	110	61	23.00
E*	72 x 30	75 x 33	2½	70 x 28	1	270	148	66.00

Prices Subject to Discount

SQUARE CAST IRON MANHOLE FRAME WITH SOLID COVER

Groove In Frame For Packing

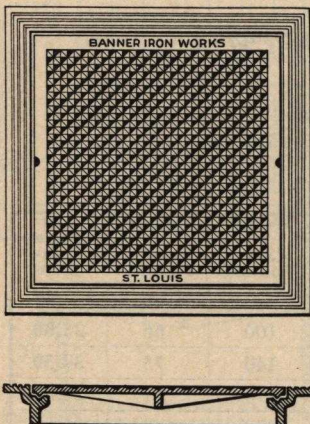


No. 4780

Size of Cover.....	24" x 24"
Size of Frame, outside.....	30" x 30"
Height of Frame.....	4"
Size of Clear Opening.....	20 $\frac{3}{4}$ " x 20 $\frac{3}{4}$ "
Weight of Cover.....	125 lbs.
Weight of Frame.....	125 lbs.
List Price, complete.....	\$35.00

SQUARE CAST IRON MANHOLE FRAME WITH SOLID COVER

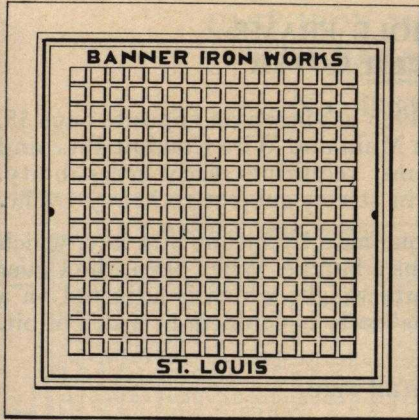
Groove In Frame For Packing



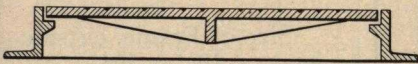
No. 4781

Size of Cover.....	20" x 20"
Size of Frame, outside.....	24" x 24"
Height of Frame.....	3"
Size of Clear Opening.....	17 $\frac{1}{2}$ " x 17 $\frac{1}{2}$ "
Weight of Cover.....	50 lbs.
Weight of Frame.....	66 lbs.
List Price, complete.....	\$16.50

Prices Subject to Discount



No. 4883

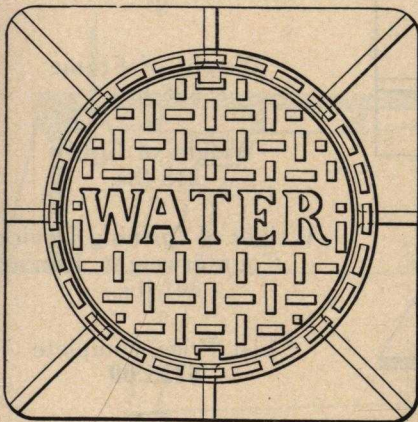


CITY OF ST. LOUIS
STANDARD CAST IRON
STOP VALVE FRAME
WITH SOLID COVER

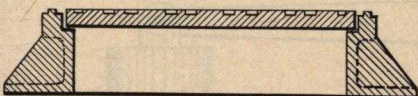
No. 4882

Diameter of Cover..... $21\frac{3}{4}$ "
Size of Frame, outside. $30\frac{1}{2}$ " x $30\frac{1}{2}$ "
Depth of Frame..... $6\frac{1}{4}$ "
Diameter of Clear Opening... 20"
Depth of Rabbet..... $1\frac{1}{4}$ "
Weight of Cover..... 101 lbs.
Weight of Frame..... 263 lbs.
List Price, complete..... **\$30.00**

This data refers to cut below.



No. 4882



SQUARE CAST IRON
MANHOLE FRAME
WITH SOLID COVER

No. 4883

Size of Cover..... 38 " x 38 "
Size of Frame, outside. $44\frac{1}{4}$ " x $44\frac{1}{4}$ "
Depth of Frame..... 4"
Size of Clear Opening. $36\frac{1}{2}$ " x $36\frac{1}{2}$ "
Depth of Rabbet..... 1"
Weight of Cover..... 395 lbs.
Weight of Frame..... 228 lbs.
List Price, complete..... **\$69.00**

This data refers to cut above.

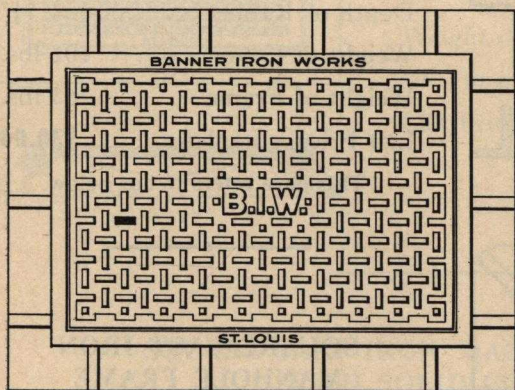
Prices Subject to Discount

CAST IRON MANHOLE FRAME WITH **BALANCED** COVER

No. 4975 as shown below and No. 4985 as shown on opposite page 35, are used as the Standard Cover for Gas Main and Wire Conduit Pits, and Manholes for Water and Sewer Systems, requiring ready accessibility. They are particularly adapted for use in streets subject to heavy traffic.

The Covers are readily opened by one man by means of a key, which releases the gravity catch and then forms a handle. When open, the Cover is held in a vertical position by a counterweight which is adjusted on a shaft with lever arms. Length of shaft is made to conform to width of pit.

No. 4975 (small size)



Size of Cover
 $21\frac{1}{2}'' \times 31\frac{1}{2}''$

Size of Frame, outside
 $29\frac{1}{2}'' \times 39\frac{1}{2}''$

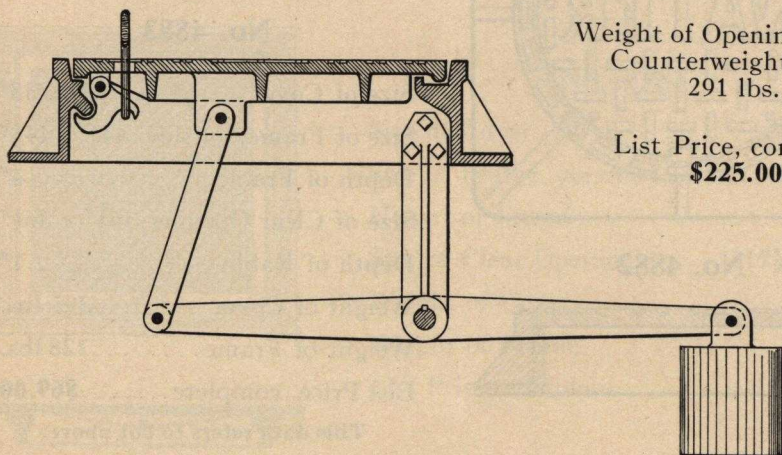
Height of Frame
8"

Weight of Frame
395 lbs.

Weight of Cover
215 lbs.

Weight of Opening Device
Counterweight, Etc.
291 lbs.

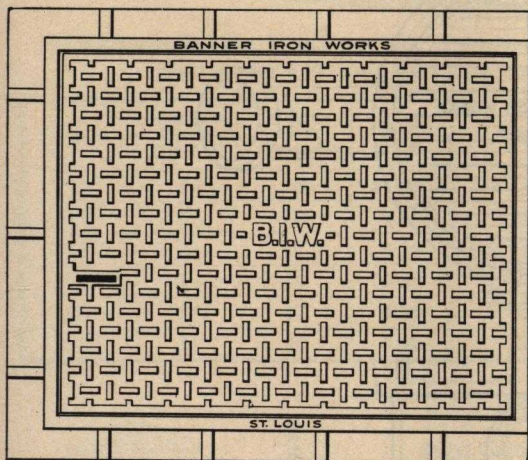
List Price, complete
\$225.00



Prices Subject to Discount

CAST IRON MANHOLE FRAME
WITH **BALANCED** COVER

No. 4985 (large size)



Size of Cover
 $27\frac{3}{4}" \times 34\frac{1}{4}"$

Size of Frame, outside
 $35\frac{1}{2}" \times 39\frac{1}{2}"$

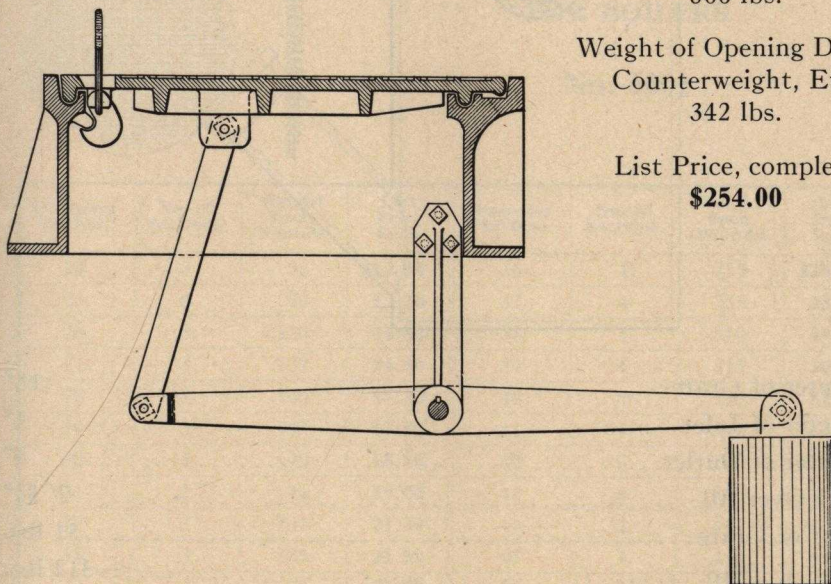
Height of Frame
14"

Weight of Frame
708 lbs.

Weight of Cover
306 lbs.

Weight of Opening Device
Counterweight, Etc.
342 lbs.

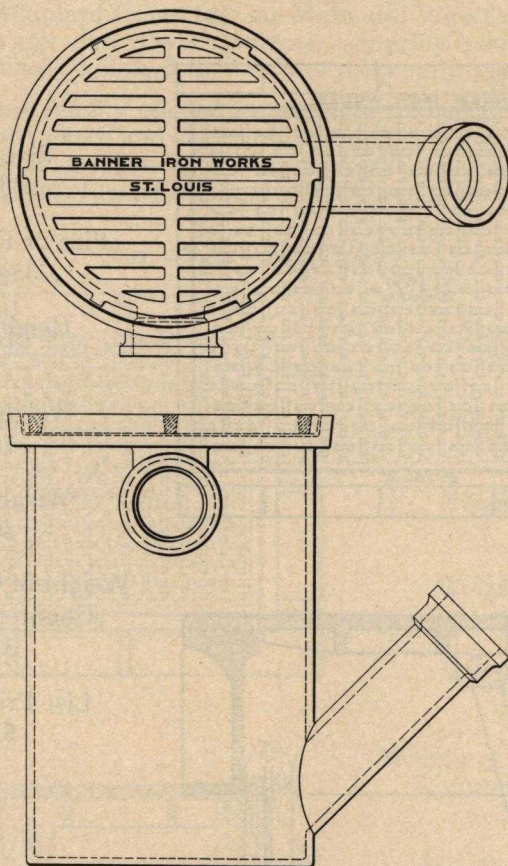
List Price, complete
\$254.00



Prices Subject to Discount

CAST IRON GARAGE SEWER TRAPS

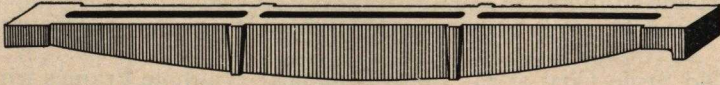
No. 4990



Diameter of Grate.....	18"
Diameter of Inlet.....	4"
Diameter of Outlet.....	4"
Height Over All.....	2' 3½"
Weight of Grate.....	51 lbs.
Weight of Trap.....	312 lbs.
List Price, complete.....	\$55.00

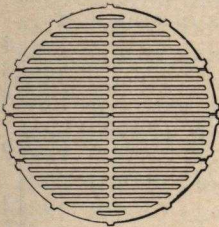
Prices Subject to Discount

CAST IRON GRATE BARS No. 5000



All Bars are Double, 3 inches wide, $\frac{3}{4}$ -inch metal, $\frac{3}{4}$ -inch air space
Bars under 4' 0" long have one separator in center

Length	Depth in Center (Inches)	Weight Each (Pounds)	List Price Each	Length	Depth in Center (Inches)	Weight Each (Pounds)	List Price Each
2' 6"	2½	28	\$2.80	4' 3"	3¾	60	\$6.00
3' 0"	2¾	30	3.00	4' 6"	4	65	6.50
3' 3"	2¾	31	3.10	5' 0"	4¼	76	7.60
3' 6"	3	36	3.60	5' 6"	4½	82	8.20
3' 9"	3¼	42	4.20	6' 0"	5	94	9.40
4' 0"	3½	54	5.40	6' 6"	5	121	12.10



ROUND CAST IRON GRATES FOR BOILERS

No. 5001

Diameter (Inches)	No. of Sections	Weight Each (Pounds)	List Price Each	Diameter (Inches)	No. of Sections	Weight Each (Pounds)	List Price Each
24	3	98	\$12.50	36	4	253	\$25.30
25	3	99	12.70	37	4	255	25.50
26	3	120	14.20	38	4	310	29.50
27	3	122	14.40	39	4	315	30.00
28	3	160	17.30	40	4	339	32.00
29	3	163	17.50	41	4	342	32.50
30	3	190	18.80	42	4	400	38.00
31	3	194	19.00	43	4	402	38.50
32	3	201	21.30	44	4	441	40.00
33	3	205	21.50	45	4	445	40.50
34	4	225	23.50	46	4	465	42.50
35	4	231	23.70	47	4	490	43.50

Prices Subject to Discount

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